BRUHATH BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

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NAME OF WORK: Modified Estimate for the work of Drilling of borewells in kempegowda ward no -01 of yelahanka Sub division.

ESTIMATE COST: RS.15.00 LAKHS

YELAHANKA SUB DIVISION,
BBMP, BANGALORE-64.

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Modified Estimate Cost 1202016.80

Name of Work:- Modified Estimate for Drilling of borewells in kempegowda ward No-01 of Yelahanka Sub Division

S.No	Description of work	Unit	No	Measurements L	B	D	Qty	Rate	Amount
	WORK SLIP A)								
1	Geophysical investigation at site for sinking borewells for supplying drinking water to the habitation either through the Hand Pump MWS or P.W.S.S. by vertical electrical sounding by adopting Venner orSchlumbergers's method. including reconnaissance survey of geological formation. Geophysical investigation of existing ground water in the vicinity. its quality. quantity and acceptability of the users. indicating the location of the site. recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre in consolidated formation for proper seating of casing pipe. depth of drilling required to cover full depth of aquifer proposed to be tapped. probable yield and other information required including transportation of instruments and accessories to work site. engaging technical personal and labour required etc. NOTE: 1) Additional rate on item 1&2 is allowed for drilling in over burden and fixing Casing pipes beyond 20 M (for fixing Casing pipes only) a) Above 20 M and upto 30 M - 15%. b) Above 30 M - 30% (Measurement of overburden is restricted to the depth of casing pipe fixed excluding initial depth of 20M and projection above ground level). 2) A sum of Rs. 100/- is to be deducted for Dry Borewell towards yield test.	No							
			2				2.00		
							2.00	4693.73	**9387.46**
2	Sinking of Borewell of 165mm dia clear using super fast hydraulic rig of capacity 300 PSIG & above 1100 CMF & above in all strata including over burdern upto 20 m. Fixing of casing pipes. collars and cap with necessary cutting. threading and welding including transportation of rig and supporting vehicle. crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (Excluding cost of casing pipes. collars. cap etc., complete) 0 to 50 m	Mtr							
			2	50.00			100.00		
							100.00	264.77	**26477.00**
3	50 to 100 m	Mtr	2	50.00			100.00		
							100.00	332.33	**33233.00**
4	100 to 150 m	Mtr	2	50.00			100.00		
							100.00	353.33	**35333.00**
5	150 to 200 m	Mtr	2	50.00			100.00		
							100.00	409.94	**40994.00**

6	200 to 250 m	Mtr	2	50.00			100.00		
							100.00	481.15	48115.00
7	250 to 300 m	Mtr	2	50.00			100.00		
							100.00	509.45	50945.00
8	Supply of ISI mark 175mm nominal bore,plain and steel casing pipe grade of steel Fe 410 of wall thickness conforming to IS 4270-2001 and latest ammendments. electrical resistance welded steel tubes. material and conforming to IS 1387-1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5-7m both ends.threaded conforming to IS 554-1985 one end fixed with socket conforming to IS 4270-2001 and the other end with screwed pipes all shall be responsibaly free from defects. The tubes shall be responsible straight end should be with ISI marking weighing 25.10kg/m.prices include Collar-Medium duty	Mtr							
					A)Up to125% of quantity		**90.00**	1764.83	158834.70
9	Supply and delivery of galvanized mild steel tubes of 6mtr standard length heavy duty (C Class) as per IS 1239 (Part-I) 1990 with latest amendments with ISI Mark (one end fitted with Heavy Duty collar and other end fitted with protective cover) 50 mm	Each							
			48				48.00		
							48.00	2784.65	**133663.20**
10	PVC pipe - OD 250mm and 6 Kg/sqcm	Mtr							
			2	6.00			12.00		
							12.00	1004.30	**12051.60**
11	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper withflexible copper with low resistance conductor confirming to13:8130-1984 and virgin grade PVC insulation and powdercoating extruded PVC sheathed suitable for working voltageupto 1100 V as per IS-694:2010, 3C x 6 mm2	Mtr							
			2	290.00			580.00		
					A)Up to125% of quantity		**562.50**	200.86	**112983.75**
					B)Above 125% of quantity		**17.50**	200.86	**3515.00**
	Basic Rate	242.00							
	Add -17% Below asTender premium	41.14							
	Total Rs	200.86							

12	Fabricating Supplying and Mounting MS Box Made out 14 SWG Suitable For Floor/ Wall Mounting Fully Weather Proof With Provision For Better Heat Dissipation. Provided With Hinged Front Cover. Equipped With Tamper Proof Locking Arrangements. With Suitable Size Clamps With Necessary Cable Entry Pipe With Gland and Box Should be Finished With 2 Coats Of red Oxide Primer Paint And Finally Finished With Approved Colour Enameled Metal Pain Etc. Complete. PWD Electrical SR-19-20 . Page No:30. Item No:5.42.1 ie.. 1200 X850X2=2040000. 850X350X2=595000. (350+450)/2=400. 400X1200=480000 =480000X2=960000. 3595000 /100=35950SQCM X0.40=14380	sqm							
	Front Back		4	0.75	0.75		2.24		
	Top & Bottom		4	0.75	0.30		0.90		
	Left & Right Sides		4	0.30	0.75		0.90		
							4.04	11935.40	**48219.02**
13	Providing.supplying to work site. Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000:3Phase. SS Bowl & Impeller with Low volt Motor as per specifications.as per necessary ammendments and instructions of engineer incharge of work. 15.00 HP - 120 LPM @ 266 m = 23 STG Outlet Dia - 2.00"	No							
			1				1.00		
							1.00	63232.55	**63232.55**
14	Earthing: Supplying and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts, nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia.	No							
			1				1.00		
							1.00	3423.75	**3423.75**
15	Supply and fixing polished wood board made of not lessthan 15mm thick plank on both sides of not more than 2pieces and fixing the same to the wall using tapered invertedwooden plugs screws. 20" x 20" x 2.5"	Each							
			1				1.00		
							1.00	261.45	**261.45**
16	Supplying & fixing of Porcelain fuse channel with cut out onexisting wooden/panel using necessary nuts, bolts andwashers. 63 A	Each							
			1				1.00		
							1.00	308.76	**308.76**
17	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materialsand 'C' Type curve, indicator ON/OFF, energy cross-3 withShort circuit breaking capacity of 10K and complete wiring asrequired confirming to IEC 60898. 50-63 A TPN	Each							

			1				1.00			
							1.00	1991.17	1991.17	
18	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum.	Cum								
			1	542.00	0.60	0.90	292.68			
							A)Up to125% of quantity	84.38	169.82	14328.56
							B)Above 125% of quantity	208.31	169.82	35374.00
	Basic Rate	186.00								
	Area Weightage @ 10%	18.60								
	Total	204.60								
	Add -17% Below asTender premium	34.78								
	Total Rs	169.82								
19	Supplying and filling in plinth with sand under floors, foundations of bridges including watering ramming consolidating and dressing complete.	Cum		Item Not Executed						
20	Supplying PVC ringtite pipes conforming to IS 4985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe alround to a depth of not less than 15 cms, with soft gravel or selected earth available from the excavation etc, complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc.63mm outer dia, 6kg/sqcm	Mtr								
			1	542.00			542.00			
							A)Up to125% of quantity	250.00	126.99	31747.50
							B)Above 125% of quantity	292.00	126.99	37081.00
	Basic Rate	153.00								
	Add -17% Below asTender premium	26.01								
	Total Rs	126.99								
20	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m . and lift upto 1.5 m. Including cost of all labour complete as per specifications	Cum								
			1	542.00	0.60	0.90	292.68			

		A)Up to125% of quantity					56.25	111.39	6265.69
		B)Above 125% of quantity					236.43	113.46	26825.00
	Basic Rate	122.00							
	Area Weightage @ 10%	12.20							
	Total	134.20							
	Add -17% Below asTender premium	20.74							
	Total Rs	113.46							
21	Supplying fully automatic star-delta starter unit push buttontype with suitable wires. 3 contactors. one adjustablethermal timer mounted on a common base plate held in steel enclosure for use on 400/440 V 3 phase and wired after fixingto the existing wooden board for motor. Above 12.5 HP upto 25 HP	No								
			1				1.00			
							1.00	7171.20	7171.20	
								Sub Total for works slip A) RS		941762.36
	B) EIRL ITEAM									
1	Supply and delivery at site wrought middle steel (galvanized) 50 mm dia GI Union confirming to IS 1239-II. 1991 with latest amendents if any (PWD Sr 2021-22 Vol-V page No 145. Item 13.60	Each								
			1				1.00			
							1.00	203.67	203.67	
	Basic Rate	219.00								
	Area Weightage @ 10%	21.90								
	Total	240.90								
	Add -17% Below asTender premium	37.23								
	Total Rs	203.67								
2	Supply and delivery at site wrought middle steel (galvanized) 50 mm dia GI hexagonal nippal confirming to IS 1239-II. 1991 with latest amendents if any (PWD Sr 2021-22 Vol-V page No 146. Item 15.60	Each								
			1				1.00			
							1.00	162.75	162.75	
	Basic Rate	175.00								
	Area Weightage @ 10%	17.50								
	Total	192.50								
	Add -17% Below asTender premium	29.75								
	Total Rs	162.75								
3	Supply and delivery at site wrought middle steel (galvanized) 50 mm dia GI Elbow confirming to IS 1239-II. 1991 with latest amendents if any (PWD Sr 2021-22 Vol-V page No 144. Item 7.60	Each								
			3				3.00			
							3.00	203.67	611.01	
	Basic Rate	219.00								
	Area Weightage @ 10%	21.90								
	Total	240.90								
	Add -17% Below asTender premium	37.23								
	Total Rs	203.67								
4	Supply and delivery at site of brand new best make gate value as per IS 778/1984 with ISI Mark and as per its lates amendments size 50 mm (PWD SR 2021 22 vol -V page No 162. item no 27.10	Each								

			23				23.00		
							23.00	1162.50	26737.50
	Basic Rate	1250.00							
	Area Weightage @ 10%	125.00							
	Total	1375.00							
	Add -17% Below asTender premium	212.50							
	Total Rs	1162.50							
5	Supply and delivery at site of brand new best make Non return value as per IS 778/1984 with ISI Mark and as per its lates amendments size 50 mm (PWD SR 2021-22 vol -V page No 162, item no 28.1	Each							
			4				4.00		
							4.00	1185.75	4743.00
	Basic Rate	1275.00							
	Area Weightage @ 10%	127.50							
	Total	1402.50							
	Add -17% Below asTender premium	216.75							
	Total Rs	1185.75							
6	Supplying of 1.1KV LTUG cable XPLE or heat resistant PVC insulated PVC eatruded inner sheath armoured UGLT cable as per IS - 1554 (part-1) or IS 7098 part -I Amouring strip thickness in average +5% and resistivity 14 ohms / kms (max) as per IS - 3975 4 core 16 sqmm (Ele SR 2019-20 P-No 40 I/No 6.4.4)	Rmtr							
			50				50.00		
							50.00	124.50	6225.00
	Basic Rate	150.00							
	Add -17% Below asTender premium	25.50							
	Total Rs	124.50							
7	Labour charges for laying of 1.1KV class UG cable in existing trench GI pipe / stone pipe/ on wall / on pole as required 6 sqmm to 16sqmm (Ele SR of 2019-20 P No 4 I/No 6.5.1)	Rmtr							
			50				50.00		
							50.00	9.86	493.02
	Basic Rate	11.88							
	Add -17% Below asTender premium	2.02							
	Total Rs	9.86							
8	Digging of trench of 0.6m deep x 0.50mtr wide refilling the trench to the required ground level and consolidating etc complete cutting road surfaces (P No 41, I No 6.6.3 KPWD Electrical SR 19.20)	Rmtr							
			50				50.00		
							50.00	68.06	3403.00
	Basic Rate	82.00							
	Add -17% Below asTender premium	13.94							
	Total Rs	68.06							

9	Labour charges for Erection Electrification and commissioning of pump sets. including aligning and balanceing of all items including supply and erection of two pair of supporting clamps. bore well caps. cable clips and water tight gland cable protectors bolts. nuts valve and gauge. tools and equipments etc involued in the job as per specifications with necessary tests as per specifications with testing of as per instructions of engineer incharge of work (PWD SR 2021-22 vol - V - Page No 163 item no 38.)	Job						6.00		
			6					6.00	5719.50	34317.00
	Basic Rate	6150.00								
	Area Weightage @ 10%	615.00								
	Total	6765.00								
	Add -17% Below asTender premium	1045.50								
	Total Rs	5719.50								
								Sub total EIRL		76895.95
								GRAND TOTAL A+B		1018658.31
								Add 18% of GST RS		183358.50
								Grand Total RS		1202016.80
	(Ruppes in words : Twele lakhs Two thousand sixteen and paise eighty only)									

Assistant Engineer
Ward No-01

Assistant Executive Engineer
Yelahanka Sub Division
Bruhat Bangalore Mahanagara Palike

Executive Engineer
Yelahanka Division
Bruhat Bangalore Mahanagara Palike

Technical Sanction
Accorded For Rs 1202016.80
Head of A/C 3226
CER NO : 63 Dt: 14/03/23

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